

**REPORT OF THE DEPARTMENT OF CONSERVATION AND
RECREATION**

**VIRGINIA WATER QUALITY IMPROVEMENT
FUND AND THE COOPERATIVE NONPOINT
SOURCE POLLUTION PROGRAM**

**TO THE GOVERNOR AND THE GENERAL ASSEMBLY OF
VIRGINIA**



**COMMONWEALTH OF VIRGINIA
RICHMOND
AUGUST 2006**

L. Preston Bryant, Jr.
Secretary of Natural
Resources



Joseph H. Maroon
Director

COMMONWEALTH of VIRGINIA
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August 2006

The Honorable Timothy M. Kaine
Governor, Commonwealth of Virginia
Patrick Henry Building, 3rd Floor
1111 East Broad Street
Richmond, Virginia 23219

Members of the Virginia General Assembly
General Assembly Building
Richmond, Virginia 23219

Dear Governor Kaine and Members of the General Assembly:

I am pleased to submit this biennial report in accordance with provisions of the Virginia Water Quality Improvement Act of 1997 (WQIA). In §10.1-2127 D, the Department is directed to report to the Governor and the General Assembly on whether cooperative nonpoint source pollution programs, including nutrient reduction programs, developed are being effectively implemented to meet the objectives of the Act. Additionally, in §10.1-2134, the Department is directed to report the amounts and recipients of grants made from the Virginia Water Quality Improvement Fund (WQIF) and the specific and measurable pollution reduction achievements to state waters anticipated as a result of each grant award, together with the amounts of continued funding required for the coming fiscal year under all fully executed grant agreements.

This report describes the WQIF nonpoint source pollution management program activities undertaken by DCR during 2004 and 2005. These activities include development of WQIF guidelines, agricultural cost-share funding allocations, support for the Conservation Reserve Enhancement Program, nonpoint source programs and projects, and issuance of a request for grant applications.

*State Parks • Soil and Water Conservation • Natural Heritage • Outdoor Recreation Planning
Chesapeake Bay Local Assistance • Dam Safety and Floodplain Management • Land Conservation*


In enacting the WQIA, the General Assembly pronounced that the restoration, protection, and improvement of the quality of state waters is a shared responsibility among state and local governments and individuals, and to that end, established the authority for cooperative programs related to nutrient reduction and other types of nonpoint source pollution. In order to accomplish this, DCR assists local governments, soil and water conservation districts, and individuals with technical and financial assistance made available through WQIF grants and other funding sources.

The activities identified in this report set the stage for continuing Virginia's ambitious water quality improvement agenda. The Department of Conservation and Recreation will continue its partnership with landowners, soil and water conservation districts, local governments, the agricultural community, the development community, conservation organizations, and staff from other Natural Resources agencies, including the Department of Environmental Quality.

The water quality improvements accomplished through the cooperative watershed initiatives and through funding identified in this report help ensure that Virginia meets its responsibilities to protect and restore the Chesapeake Bay and rivers and streams throughout the Commonwealth. Virginia has much to be proud of in this arena but we also have considerable work ahead in order to meet our state goals.

We look forward to working with you to improve Virginia's water quality.

Respectfully submitted,

A handwritten signature in cursive script that reads "Joseph H. Maroon".

Joseph H. Maroon
Director

cc: The Honorable L. Preston Bryant, Jr.

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EXECUTIVE SUMMARY

This report fulfills the Department of Conservation and Recreation's (DCR) legislative requirement under § 10.1-2134 of the *Virginia Water Quality Improvement Act of 1997* (WQIA). This report describes the nonpoint source pollution management program activities undertaken by DCR during 2004 and 2005. These activities include development of WQIF guidelines, agricultural cost-share funding allocations, support for the Conservation Reserve Enhancement Program, nonpoint source programs and projects, and issuance of a request for grant applications. Chapter 21.1 of Title 10.1 of the *Code of Virginia* requires that an annual report be submitted to the Governor and the General Assembly specifying the amounts and recipients of grants made from the Water Quality Improvement Fund (WQIF) and pollution reduction achievements from these grants. WQIF grants awarded to date are provided along with pollutant reductions achieved.

Section 10.1-2127.D., Chapter 21.1 of Title 10.1 of the *Code of Virginia* also directs DCR to report each year to the Governor and the General Assembly on the implementation of cooperative nonpoint source pollution programs in Virginia. In enacting the WQIA, the General Assembly pronounced that the restoration, protection, and improvement of the quality of state waters is a shared responsibility among state and local governments and individuals, and to that end, established the authority for cooperative programs related to nutrient reduction and other types of nonpoint source pollution. In order to accomplish this, DCR assists local governments, soil and water conservation districts, and individuals with technical and financial assistance made available through WQIF grants and other funding sources. As required by the WQIF this report includes a report on the cooperative nonpoint source program activities.

Section 10.1-104.1. of the *Code of Virginia* states that DCR shall have the lead responsibility for the Commonwealth's nonpoint source pollution management program. This section also assigns responsibility for the distribution of assigned funds, identification and establishment of priorities of nonpoint source related water quality problems, and the administration of a statewide nonpoint source advisory committee.

There were no deposits to the Water Quality Improvement Fund for fiscal years 2002, 2003, and 2004. In fiscal year 2005 a deposit of \$9,417,500 was made to the fund. In addition to funds included for WQIF in the FY05 budget, funding through the Virginia Marine Resource Commission dredging fund and the income tax check-off for Chesapeake Bay restoration were earmarked for NPS pollution control, bringing the total NPS funding to \$10,510,687. Additional funding became available through WQIF for nonpoint source implementation in FY 2006. The General Assembly amended budget included \$7,500,000 and a General Assembly 2005 action allocated an additional \$22,664,600 for a total of \$30,164,600. The majority of FY05 and FY06 implementation funds are being directed to the Agricultural BMP Cost Share and Conservation Reserve Enhancement Programs. Implementation funds will also being used to support competitive grants for cooperative nonpoint source programs with localities, strategic nonpoint source water quality initiatives, and programs offered by the Department of Forestry.

DCR is charged in assisting in the development of local cooperative NPS pollution programs, in accordance with the Water Quality Improvement Act, Section 10.1-2124.B. of the *Code of Virginia*. The purpose of the programs is to maintain and restore water quality in stream segments where NPS pollution is a significant factor. The outcome of cooperative NPS pollution programs has been a combination of existing efforts and new opportunities that address specific water quality impairments and improvements, supported by the public and the numerous stakeholders.

DCR reaffirmed existing partnerships and continued to pursue new relationships through cooperative watershed initiatives. DCR's eight watershed offices, throughout the Chesapeake Bay watershed and the Southern Rivers watershed, aggressively sought to establish and solidify conservation partnerships during 2004 and 2005 with local governments, state and federal agencies, conservation organizations, volunteers, landowners, and local industries and businesses.

In continuing to provide assistance to cooperative watershed roundtables, DCR staff has been working closely with key partners to arrange a statewide meeting of watershed roundtable chairs and other invited guests. A statewide roundtables meeting was held in conjunction with the Environment Virginia Conference in Lexington, Virginia in April 2005.

In cooperation with the other Chesapeake Bay states and the United States Environmental Protection Agency, Virginia agreed to basin level allocations for nutrients and sediments. The Department of Conservation and Recreation, under the guidance of the office of the Secretary of Natural Resources, completed coordination of a year-long public participation planning process to develop tributary strategies. The strategies set the amount of reductions needed to remove the Chesapeake Bay and its Virginia tributaries from the list of impaired waters. Public comment drafts were released in April 2004. The final statewide tributary strategy was released in early February 2005 with individual basin strategies released shortly thereafter.

As required by the WQIA, this report presents information related to future funding needs. Estimating these needs is a complex endeavor that requires extensive information about the health of waters throughout the Commonwealth. Within the Chesapeake Bay watershed, Virginia is fortunate to have tributary strategies completed. These strategies not only guide implementation efforts, but also offer the best available estimate of implementation costs.

Another significant funding need will be the implementation of TMDL projects to remove waters from the Virginia Department of Environmental Quality's impaired waters list. A cooperative nonpoint source pollution control program, with a watershed-based approach, is expected to increase interest from localities to apply for grant funds to implement water quality improvement projects.

The Commonwealth of Virginia has made progress in protecting and restoring the health of its rivers, streams, lakes, and the Chesapeake Bay through a substantial infusion of state and federal funding resources. With improving budget forecasts of potential increases being provided to the Water Quality Improvement Fund, significant water quality improvements can be achieved. In order to meet the difficult challenge of restoring the health of impaired waters and the Chesapeake Bay, the commonwealth will have to maintain and build on the progress made in recent years.

CHAPTER 1: THE VIRGINIA WATER QUALITY IMPROVEMENT ACT OF 1997

Background

The *Virginia Water Quality Improvement Act (WQIA)* was passed during the 1997 legislative session of the Virginia General Assembly and signed into law on March 20, 1997. The Act established the Water Quality Improvement Fund (WQIF) to provide funding for water quality improvements throughout the Commonwealth. The fund is the principal source of state cost-share money to implement the nutrient and sediment reduction “Tributary Strategies” prepared pursuant to the Chesapeake 2000 Agreement and the *Code of Virginia*. The fund also provides grants for on the ground practices to control nonpoint source pollution in watersheds in Virginia that drain to waters other than the Chesapeake Bay, called the “Southern Rivers”.

Nonpoint Source Programs

The *Code of Virginia* designates the Virginia Department of Conservation and Recreation (DCR) as the lead agencies for the Commonwealth’s nonpoint source pollution management programs. This section also assigns responsibility to DCR for the distribution of assigned funds, identification and establishment of priorities of nonpoint source related water quality problems, and the administration of a statewide nonpoint source advisory committee. The majority of DCR soil and water conservation efforts are devoted to controlling nonpoint source pollution to prevent degradation of the Commonwealth’s waterways. Nonpoint source pollution is water pollution caused by diffuse runoff that is not confined to a single discharge point such as a wastewater treatment plant or industrial discharge pipe and includes runoff from developed lands, agricultural lands, abandoned mines and other sources.

Statewide nonpoint source pollution control programs and services support both individual natural resource stewardship and assist local governments with resource management. These statewide programs are funded through state agency budgets and through non-general fund revenues. DCR staff administer nonpoint source pollution control programs required by state and federal law. These programs include erosion and sediment control, stormwater management, nutrient management, agricultural best management practices, shoreline erosion control, floodplain management, dam safety, and public beach conservation as well as the administrative, technical and financial support provided to soil and water conservation districts (SWCDs). Services are delivered to local governments, interest groups and citizens by staff members located in eight regional offices. Staff in Richmond serve as a resource for field staff.

In implementing the nonpoint source pollution program, DCR receives advice from the Nonpoint Source Advisory Committee (NPSAC), an interagency committee comprised of representatives of federal and state agencies.

The mission of this committee is to serve as a forum to facilitate effective nonpoint source pollution reduction and prevention programs that support the achievement and maintenance of beneficial uses of water throughout the Commonwealth. In addition to DCR, NPSAC is comprised of representatives from the Department of Agriculture & Consumer Services, the Department of Environmental Quality, the Department of Forestry, the Department of Game and Inland Fisheries, the Department of Health, the Department of Mines, Minerals, and Energy, the Department of Transportation, Virginia Cooperative Extension, the Virginia Marine Resources Commission, the U.S. Department of Agriculture Farm Services Agency, the U.S. Forest Service, the U.S. Department of Agriculture National Resources Conservation Service, the U.S. Environmental Protection Agency, and the U.S. Geological Survey.

WQIF Funding Summary

For fiscal years 2005 and 2006, a total of approximately \$37 million was available through the Water Quality Improvement Fund for nonpoint source implementation. A chart summarizing available WQIF funds is provided below.

Water Quality Improvement Fund - Available Funds		
Funding Source	FY2005	FY2006
Governors Budget WQIF*	\$ 1,917,500	\$ -
WQIF General Assembly 2005 Actions*	\$ -	\$ 22,664,600
WQIF General Assembly Amended Budget	\$ 7,500,000	\$ 7,500,000
VMRC Dredging Fund 2004	\$ 863,187	\$ -
Income Tax Checkoff - Chesapeake Bay Restoration	\$ 230,000	\$ -
Subtotal	\$ 10,510,687	\$ 30,164,600
*15% Reserved for "Rainy Day Fund"	\$ (287,625)	\$ (3,399,690)
TOTAL WQIF AVAILABLE FUNDING	\$ 10,223,062	\$ 26,764,910

CHAPTER 2: PROGRAM ACTIVITIES

Development of Water Quality Improvement Fund Guidelines

Section 10.1-2129 of the *Code of Virginia* call for the Secretary of Natural Resources is with developing written guidelines for the distribution and conditions of water quality improvement grants, and criteria for prioritizing funding requests. Secretary of Natural Resources W. Tayloe Murphy, Jr. reissued the *Virginia Water Quality Improvement Fund Guidelines* (WQIF Guidelines) on September 22, 2005 in order to incorporate amendment made to the WQIA at the 2005 session of the General Assembly. Copies of the transmittal letter from Secretary Murphy, the *Virginia Water Quality Improvement Fund Guidelines*, and a summary and response to public comments on the grant guidance are available at www.dcr.virginia.gov/sw/wqia.htm.

The final guidelines provide clarification on the statewide and programmatic division of funds for both point and nonpoint source pollution control activities. Eligible categories of activities for nonpoint source funding support are the Agricultural Best Management Practices Cost-Share Program, Conservation Reserve Enhancement Program, Water Quality Initiative Projects, and Cooperative Nonpoint Source Pollution Program Projects with Local Governments. The guidelines specify eligible activities within the Chesapeake Bay watershed and the Southern Rivers watersheds. The guidelines also establish matching fund requirements, grant review criteria, and requirements for grant agreements.

Planned Use of Available Funds

As outlined in the WQIF Guidelines this funding is made available for four categories of nonpoint source pollution control projects. The majority of the funding allocation is to support the first two categories, the Agricultural Cost-Share Program and the Conservation Reserve Enhancement Program. From FY2005 and FY2006 WQIF allocations, over \$26 million is allocated to the Agricultural BMP Cost Share Program and \$4.7 million to the Conservation Reserve Enhancement Program. An allocation of \$230,000 to WQIF from the Virginia Marine Resource Commission Dredging Fund will be used for administrative support providing funding for two full time employees over two years to manage and administer WQIF programs and related implementation initiatives.

The planned use of available funds also includes approximately \$4.7 million in funding to be made available for other nonpoint source implementation projects. The project funding will be made available for NPS programs, projects, and competitive grants through two programs described in the WQIF Guidelines: Water Quality Initiative Projects and Cooperative Nonpoint Source Pollution Program Projects with Local Governments. Funding for these categories of projects will be awarded through the FY2006 WQIF Request for Grant Applications, for which further details are provided in the upcoming sections of this report. Summaries of FY2005 & FY2006 WQIF funding allocations and planned uses are outlined in the chart below.

Planned Use of Available WQIF Funds		
WQIF Program Funding	FY2005	FY2006
Agricultural BMP Cost Share Program	\$ 6,233,062	\$ 20,000,000
Conservation Reserve Enhancement Program	\$ 2,230,000	\$ 2,514,910
Administrative Support	\$ 260,000	\$ -
NPS Programs, Projects, & Competitive Grants	\$ 1,500,000	\$ 1,250,000
Cooperative NPS Local Programs	\$ -	\$ 3,000,000
TOTAL FUNDING ALLOCATIONS	\$ 10,223,062	\$ 26,764,910

Agricultural Cost-Share Agreement and SWCD Allocations

Virginia’s Agricultural Best Management Practice Cost-Share Program provides financial assistance as an incentive for the voluntary installation of best management practices to improve water quality. Agricultural BMPs are significant components of all the Chesapeake Bay Tributary Strategies and many Total Maximum Daily Load (TMDL) requirements for impaired streams. DCR relies on Soil & Water Conservation Districts (SWCDs) to implement this program. The Virginia Agricultural BMP Cost-Share Program started in 1984 as a demonstration program that focused on educating farmers about the benefits, both financial and environmental, that various soil and water conservation practices provide. With increased funding levels, DCR is focusing on widespread and targeted implementation of cost-effective BMPs.

Momentum has built for agricultural BMPs because they promise cost-effectiveness as we near 2010. In order to target implementation funding, DCR has established funding priorities for practices that are in-line with recommendations of the Chesapeake Bay Commission in their 2005 report “Cost Effective Practices for the Bay”. These practices include cover crops, conservation tillage and nutrient management. DCR has also prioritized two other practices with proven water quality benefits: livestock exclusion (fencing livestock out of streams) and the establishment of riparian buffers. These five priority BMPs will be emphasized with the FY2006 WQIF funding in order to accomplish the most cost effective BMPs for nutrient reduction. A breakdown of 2006 program year allocations to SWCDs through grants for agricultural BMP cost-share funding is provided in Appendix A.

Measurable Results – Agricultural Cost-Share Program

A summary of the agricultural BMP implementation activities for July 1, 2004 through June 30, 2005 is provided in the chart below. This includes data for number of farmers receiving funding, number of practices installed, acres benefited and estimates of tons of soil loss reduced, pounds of nitrogen reduced, pounds of phosphorus reduced and tons of waste treated.

Animal & Crop Practices - By Basin (Summarized as of 9/15/2005)							
Reporting Period July 1, 2004 - June 30, 2005							
	No.	No.	Acres	Tons SL	Lbs N	Lbs P	Tons Waste
BASIN	Farmers	Practices	Benefited	Reduced	Reduced	Reduced	Treated
POTOMAC	60	123	5,723.85	9,433.92	51,320.53	8,408.62	
SHENANDOAH	107	182	7,572.70	13,403.91	72,917.26	16,603.86	30,744.90
RAPPAHANNOCK	70	202	7,732.60	7,447.67	40,515.29	7,681.10	
YORK	26	101	2,781.50	4,057.15	22,070.91	4,123.50	120.00
JAMES	95	450	11,299.93	8,799.12	47,867.20	9,238.91	
BAY COASTAL	42	223	8,217.39	43,720.67	237,840.41	59,180.85	453.75
OCEAN COASTAL	13	81	3,491.40	18,918.35	102,915.84	25,908.22	
ALBEMARLE SOUND	6	13	561.30	740.30	4,027.22	744.84	
CHOWAN	90	732	31,830.11	7,454.02	40,549.88	10,915.35	1,300.00
ROANOKE	102	169	3,676.68	17,958.56	97,694.54	19,953.75	4,100.00
YADKIN	4	4	31.00	89.00	484.16	89.00	
NEW	69	146	2,763.70	31,829.00	173,149.74	31,366.89	1,750.00
CLINCH/POWELL	31	35	1,399.30	5,495.88	29,897.62	5,623.85	
HOLSTON	133	211	2,952.40	17,219.22	93,672.56	18,851.56	4,570.00
BIG SANDY	19	19	25.00	56.50	307.36	56.50	
Total	867	2,691	90,058.86	186,623.27	1,015,230.52	218,746.80	43,038.65

A summary of the cost share expenditures for these practices is below.

Summary of BMP Costs & Funding (Data summarized as of 9/15/05)				
Reporting Period July 1, 2004 - June 30, 2005				
BASIN	Total Cost (\$)	State C/S (\$)	Other C/S (\$)	Farmer Input (\$)
POTOMAC	\$ 414,545.37	\$ 292,627.66	\$ 3,063.94	\$ 118,853.77
SHENANDOAH	\$ 2,542,764.02	\$ 922,564.88	\$ 582,892.59	\$ 1,037,306.55
RAPPAHANNOCK	\$ 427,714.50	\$ 283,979.98	\$ 3,002.48	\$ 140,732.04
YORK	\$ 152,373.56	\$ 82,669.67	\$ -	\$ 69,703.89
JAMES	\$ 893,812.20	\$ 492,125.76	\$ 43,128.42	\$ 358,558.02
BAY COASTAL	\$ 198,722.40	\$ 176,323.26	\$ -	\$ 22,399.14
OCEAN COASTAL	\$ 96,879.90	\$ 41,863.67	\$ -	\$ 55,016.23
ALBEMARLE SOUND	\$ 39,985.14	\$ 37,574.38	\$ -	\$ 2,410.76
CHOWAN	\$ 590,903.07	\$ 208,149.99	\$ 4,872.00	\$ 377,881.08
ROANOKE	\$ 1,039,461.24	\$ 447,346.85	\$ 177,437.81	\$ 414,676.58
YADKIN	\$ 21,326.46	\$ 16,632.35	\$ -	\$ 4,694.11
NEW	\$ 428,371.32	\$ 264,752.71	\$ 3,381.40	\$ 160,237.21
CLINCH/POWELL	\$ 335,809.00	\$ 182,435.96	\$ 837,088.00	
HOLSTON	\$ 706,046.11	\$ 384,093.17	\$ 114,328.55	\$ 207,624.39
BIG SANDY	\$ 29,715.40	\$ 3,555.30	\$ 20,175.00	\$ 5,985.10
Total	\$ 7,918,429.69	\$ 3,836,695.59	\$ 1,789,370.19	\$ 2,292,363.91

Conservation Reserve Enhancement Program

The Virginia Conservation Reserve Enhancement Program (CREP) aims to improve water quality and wildlife habitat by offering financial incentives, cost-share and rental payments to farmers who voluntarily restore riparian buffers, filter strips and wetlands through the installation of approved conservation practices. CREP is an enhancement to the federal Conservation Reserve Program (CRP), a U.S. Department of Agriculture Farm Services Agency program, which was established in 1985. CRP was established to provide a cost-effective means to address priority agricultural resource problems by targeting federal and state resources to specific geographic regions of particular environmental sensitivity. CREP applications are accepted by the Farm Service Centers within CREP eligible areas until December 31, 2007.

The Virginia CREP program is divided into two regions. The Chesapeake Bay CREP targets Virginia's entire Chesapeake Bay watershed (approximately 60% of the Commonwealth) and calls for the installation of 22,000 acres of riparian buffer and filter strips as well as 3,000 acres of wetland restoration. The Southern Rivers CREP targets watersheds outside the Chesapeake Bay drainage basin and aims to establish 13,500 acres of riparian buffer and filter strip plantings and 1,500 acres of wetland restoration. Statewide, these programs are expected to reduce annual nitrogen loads to waterways by more than 710,000 pounds, phosphorus by more than 114,000 pounds and sediment by more than 62,000 tons.

State cost-share payments for the CREP program, with funding from the Water Quality Improvement Fund, are administered through local Soil and Water Conservation District offices. The state reimburses up to 25 percent, not to exceed \$200 per acre of restored buffer or wetland, of conservation practice cost deemed eligible by the local SWCD. A 25 percent state income tax credit is available for out-of-pocket expenses. Federal reimbursement is made through the Farm Service Agency for up to 50 percent of a participant's eligible expenses for implementing best management practices. After the installation of conservation practices, the Commonwealth will pay an additional \$5000 / acre for the recordation of a permanent open space easement to protect buffers in perpetuity.

FY2005 and FY2006 WQIF funding for the CREP program was provided for the Southern Rivers watershed to add an additional 5000 acres to its original goal of 10,000. To accelerate CREP enrollment in the Chesapeake Bay watershed, additional funding from WQIF is being offered to landowners for a CREP bonus of \$100 / acre for 100 foot wide buffers. This program will enhance opportunities for securing permanent riparian buffer easements. This initiative is intended to achieve roughly 50% (7,000 acres) with 100-foot buffers. A wetlands bonus payment of \$ 200 / acre is also being offered to Virginia landowners for approximately 4,000 acres in the Chesapeake Bay watershed. Funding will also be used to accelerate and promote signup and implementation of CREP in the Chesapeake Bay watershed through assistance provided to SWCDs.

A summary of CREP cost share assistance to farmers for the period of July 1, 2004 through June 30, 2005 is provided in the chart below. The chart summarizes acres of buffer restored and miles of stream buffered as well as estimated reductions for the tons of soil loss, pounds of nitrogen, and pounds of phosphorus.

Virginia CREP Tracking Summary (Summarized as of 10/4/2005)
Reporting Period July 1, 2004 - June 30, 2005

BASIN	No. Farmers	No. Practices	Acres of Buffer Restored	Miles of Stream Buffered	Tons SL Reduced	Lbs N Reduced	Lbs P Reduced	Total BMP Cost (\$)	State CREP Amount(\$)	Other Payment Amount(\$)
CHESAPEAKE BAY DRAINAGE AREA										
BAY COASTAL	1	3	1.50	0.21	16.00	87.04	16.00	\$ 15,546.41	\$ 405.00	\$ 5,625.00
JAMES	33	99	258.60	21.95	304.61	1,657.07	293.20	\$ 495,217.36	\$ 63,296.33	\$ 272,489.80
OCEAN COASTAL										
POTOMAC	8	21	69.50	4.73	181.22	985.83	143.89	\$ 127,062.50	\$ 18,672.25	\$ 59,955.00
RAPPAHANNOCK	15	35	299.50	31.43	257.69	1,401.84	214.64	\$ 308,493.01	\$ 58,737.01	\$ 26,723.00
SHENANDOAH	39	93	332.40	20.38	981.30	5,338.27	982.66	\$ 532,465.20	\$ 64,140.67	\$ 237,036.00
YORK	7	16	53.40	6.65	72.64	395.17	61.18	\$ 94,440.60	\$ 10,150.13	\$ 20,406.80
Ches. Bay Total	103	267	1,014.90	85.35	1,813.46	9,865.22	1,711.57	\$ 1,573,225.08	\$ 215,401.39	\$ 622,235.60
SOUTHERN RIVERS DRAINAGE AREAS										
ALBEMARLE SOUND	9	20	409.20	63.75	43.86	238.60	54.48	\$ 84,458.79	\$ 35,527.08	\$ 32,417.50
BIG SANDY										
CHOWAN	74	250	1,288.70	143.43	1,006.41	5,474.74	1,476.45	\$ 485,973.41	\$ 179,963.63	\$ 171,594.00
CLINCH/POWELL	27	84	93.80	10.80	452.90	2,463.80	475.82	\$ 424,335.17	\$ 36,153.23	\$ 200,630.57
HOLSTON	40	109	98.00	15.18	485.94	2,643.54	526.53	\$ 440,161.29	\$ 41,344.25	\$ 207,400.00
NEW	20	69	95.30	8.89	297.16	1,616.56	285.30	\$ 291,222.65	\$ 30,263.94	\$ 142,073.75
ROANOKE	10	36	127.20	11.21	1,065.10	5,794.14	1,310.55	\$ 319,122.04	\$ 42,366.13	\$ 128,608.49
YADKIN	1	3	7.90	0.97	55.30	300.83	55.30	\$ 24,659.50	\$ 2,172.50	\$ 11,391.00
S. Rivers Total	181	571	2,120.10	254.23	3,406.67	18,532.21	4,184.43	\$ 2,069,932.85	\$ 367,790.76	\$ 894,115.31
Statewide Total	284	838	3,135.00	339.58	5,220.13	28,397.43	5,896.00	\$ 3,643,157.93	\$ 583,192.15	\$ 1,516,350.91

Nonpoint Source Programs and Project Support

Approximately \$4.7 million in combined FY2005 and FY2006 WQIF funding is allocated to support nonpoint source pollution reduction projects and programs. These funds will be distributed through grant agreements with the Department of Forestry for forestry initiatives, and to other project sponsors selected through a competitive process to fund other priority implementation programs.

In partnership with the Department of Forestry (DOF), a total of \$500,000 in WQIF funding will support forestry nonpoint source pollution programs to promote increased riparian forest buffer plantings, stream restoration, urban tree canopy restoration, and stormwater mitigation projects. DOF funding through WQIF will be used to support a pilot silvicultural best management practice cost-share program. This program will be targeted to watersheds containing Total Maximum Daily Load (TMDL) stream segments or other priority watersheds as that meet state agency criteria. In addition, DOF will offer an open request for proposals to fund urban canopy demonstration projects; streamside restoration including riparian forest buffer plantings, riparian forest buffer plantings where the Conservation Reserve Enhancement Program is not eligible; and vegetative stormwater mitigation projects such as “rain gardens”. Projects within impacted stream segments such as in a TMDL segment or streams named in the Virginia 303(d) list will be given priority. Nonpoint source pollution reduction data will be reported for all projects supported with WQIF funding.

DCR is promoting urban best management practices and support for local nonpoint source pollution program through a request for grant applications. Projects from local governments and other entities will be awarded funding for project that reduce water quality impacts of urban, suburban, and rural developed lands. Further details on the DCR request for grant applications are provided in the following section.

Issuance of Request for Grant Applications

On October 14, 2005, DCR issued the FY2006 Water Quality Improvement Fund, Request for Grant Applications. Approximately \$4.7 million in combined WQIF FY2005 and FY2006 funding allocations will be made available for a wide range of nonpoint source implementation projects. Grant funding is made available through this competitive process to support two WQIF program activities: Water Quality Initiatives Program (also referenced as Strategic Nonpoint Source Water Quality Initiatives) and Cooperative Nonpoint Source Pollution Programs with Local Governments.

This request was distributed by mail to over 750 potential grant recipients including county administrators, chairs of county board of supervisors, town managers, city managers, public utility and public works directors, nonprofit organizations, soil and water conservation district chairs, planning district commissions, and others. An announcement was also distributed electronically to thousands of contacts through email distribution lists from Richmond as well as regional distribution lists coordinated by the DCR regional offices. A copy of the request for

grant applications is available at www.dcr.virginia.gov/sw/wqia.htm.

The DCR FY2006 WQIF deadline for submitting applications and project proposals was December 15, 2005. Funding split for projects selected for awards will be a maximum 60% allocation to Chesapeake Bay watershed and a minimum 40% to be spent in the Southern Rivers watersheds. All projects selected for funding will facilitate reductions in nonpoint source pollution and water quality improvements in Virginia's streams, lakes, rivers, and the Chesapeake Bay. Priority implementation initiatives include those highlighted in the Virginia Tributary Strategies as well as Total Maximum Daily Load implementation or restoration plans.

The target for completing the WQIF proposal review and awards determination process is Spring 2006. Awards will be posted for public notice on the DCR WQIA website, <http://www.dcr.virginia.gov/sw/wqia>. DCR intends to begin executing WQIF project agreements as early as April 2006. Additional details regarding the two WQIF program activities supported through the request for grant applications are described below.

Strategic Nonpoint Source Water Quality Initiatives

Approximately \$1.7 million of FY2006 funding is available for Strategic Nonpoint Source Water Quality Initiatives program. The funding range for grant projects is \$25,000 - \$100,000. Proposals for this program were accepted from state agencies, educational institutions, local governments, planning district commissions, soil and water conservation districts, nonprofit organizations and individuals (defined as any corporation, foundation, association or partnership of one or more persons.) A wide range of projects are eligible for funding. The types of projects being considered include the implementation of demonstration projects for:

- Stormwater management retrofits
- Promotion of better site design, low impact development, cluster development
- Replacement of failing septic systems
- Streambank restoration
- Buffer protection or long-term water quality easement programs
- Alternative animal waste management solutions
- Restoration projects with measurable water quality improvements

DCR has made an initial commitment under the Strategic Water Quality Initiatives Program to support a pilot project with Virginia Tech, *Precision Phosphorus Feeding: Targeted Environmental Solutions for Virginia Dairy Farms*, which will offer incentive payments for farms to reduce overfeeding of phosphorus. Approximately three hundred producers will be enrolled in a scaled incentive program, with payments up to \$12 per milking cow per year for two years for producers feeding less than 5% excess phosphorus. Reduced overfeeding of dietary phosphorus is a technique to reduce phosphorus excretion. Results of the project would be shared widely with dairy producers in websites, seminars and field days.

Cooperative Nonpoint Source Pollution Programs with Local Governments

DCR intends to make funds available for long-term NPS pollution reduction initiatives by localities through the Cooperative Nonpoint Source Pollution Program with Local Governments. Approximately \$3 million in FY2006 WQIF funding will be awarded available to cities, counties, and towns for project funding through this program. Long-term proposals were accepted for projects that identify specific request for WQIA funding from future FY2007, FY2008, and FY2009 WQIF appropriations. Projects selected for funding must include an on-the-ground implementation component as well as at least one other component addressing program enhancement or capacity building. Final awards will be for projects that address implementation aspects of the Virginia Tributary Strategies, TMDL restoration (implementation) plans, or significant nonpoint source pollution reduction programs to improve water quality.

Example project areas include the development and implementation of:

- Stormwater management plans and ordinances that enhance state requirements
- Programs resulting in permanent protection of riparian buffers
- Local stream rehabilitation & protection programs
- Nutrient management planning & implementation programs
- Septic system pump out, repair, or replacement programs
- Local government wetland rehabilitation & restoration programs

Proposals Received and Funding Requests

A total of 102 proposals requesting over \$10 million in FY2006 WQIF funding were received by the postmarked deadline of December 15, 2006. This funding request was matched with over \$14 million in non-state funding. Future WQIF funding requests for FY2007 and beyond were approximately \$8.5 million. Initial calculations show that over \$7 million in funding was requested from 75 project sponsors in the Chesapeake Bay watershed, over \$2 million was requested in the Southern Rivers watersheds from 21 project sponsors, and six project sponsors with proposals with statewide application or that fall into both major watershed areas requesting approximately \$700,000.

Fifty-four localities submitted proposals. Nonprofit organizations accounted for 19 proposals. Soil and water conservation districts as well as colleges / universities each submitted six proposals. Five or less proposals were received from private sector companies, planning district commissions, state agencies, and other entities of local or federal government. The majority of proposals, approximately sixty-six, relate to stormwater management. Numerous proposals also address nutrient management, riparian buffer protection, stream restoration, wetlands restoration, and other nonpoint source initiatives and programs. Proposals in the Chesapeake Bay watershed address tributary strategy implementation objectives. Members of a review committee consisting of DCR and other agency or local government staff will evaluate and score proposals based on the reviewers respective areas of expertise and program responsibilities. Projects will be scored for each of the evaluation areas listed in the request for

grant applications including the pounds of total nitrogen, phosphorus, and sediment reduced by the project. DCR will consider geographic distribution and diversity of project types.

The Water Quality Improvement Act requires that an announcement of projects approved for funding be made available for public comment at least 30-days prior to executing grant agreements. This list will be posted on the DCR web site, <http://www.dcr.virginia.gov/sw/wqia>. The target for WQIF awards determination and posting for public comment is Spring 2006. Grant agreements will be distributed following the public comment period and will include measures for tracking NPS reductions. A list of all proposals received is attached as Appendix B.

CHAPTER 3: COOPERATIVE NONPOINT SOURCE POLLUTION PROGRAMS

DCR is charged in assisting in the development of local cooperative NPS pollution programs, in accordance with the Water Quality Improvement Act, Section 10.1-2124.B of the *Code of Virginia*. The purpose of the cooperative nonpoint source pollution programs is to maintain and/or restore water quality standards in stream segments where NPS pollution is a significant loading factor. NPS pollution programs require locally based remedies that address the unique, site-specific, and varied causes of NPS contaminants. Cooperative NPS pollution programs are combinations of programmatic tools, and technical and financial resources of varying emphasis used to target water quality impairments in a given watershed and political jurisdiction. A cooperative approach to protecting water quality helps local stakeholders develop their capabilities individually and collectively to address local water quality impairments.

Existing Nonpoint Source Pollution Control Programs and Services

Virginia Conservation Partnership

Virginia's 47 Soil and Water Conservation Districts (SWCDs) have served the Commonwealth for approximately 70 years. This cooperative relationship provides efficient delivery of natural resource programs and services to landowners. Along with DCR, the primary partners of the Virginia Conservation Partnership are Soil and Water Conservation Districts (SWCDs), and the US Department of Agricultural Natural Resources Conservation Service (NRCS). SWCDs provide local connections with landowners and the farming community. NRCS provides technical expertise for the installation of conservation best management practices. DCR supports SWCDs with training, guidance, and financial assistance to help achieve the commonwealth's water quality goals.

The SWCDs were established in the 1930s to develop comprehensive programs and plans to conserve soil resources, control and prevent soil erosion, prevent floods and conserve, develop, utilize and dispose water. Since the mid-1980s, DCR has relied heavily on districts to help deliver many programs aimed at controlling and preventing NPS pollution. With their volunteer boards and more than 150 full and part-time technical and administrative employees statewide, districts provide a valuable delivery system for Virginia's statewide NPS prevention programs. Key SWCD NPS control and prevent efforts include: implementation of the Virginia Agricultural BMP Cost-Share Assistance Program, local assistance with delivery of erosion and sediment control ordinances, conservation planning assistance and plan approval of farm plans in accordance with state and local requirements, technical expertise for design and installation of farm conservation practices implemented voluntarily by Virginia farmers, and education through field days, public meetings and classroom programs.

During 2005, Soil and Water Conservation District Boards, with support from DCR staff, conducted hundreds of monthly board meetings and sponsored hundreds of technical training sessions and conservation demonstrations, tours, and events. With DCR funding and oversight, SWCDs targeted millions of dollars to address significant agricultural water quality problems in high priority watersheds. SWCD staff fulfills established roles with local governments as they cooperatively implement ordinances that control sediment from predominantly urban construction and development. In addition, districts play a significant role in coordination and delivery of services that support implementation of county ordinances including agricultural provisions of local Chesapeake Bay Preservation Act ordinances and assist with implementation of Virginia's Agricultural Stewardship Act.

The significant water quality challenges facing the Commonwealth will put additional burdens on Soil and Water Conservation Districts and additional staff and resources will be necessary to deliver nonpoint source pollution reduction programs.

Erosion and Sediment Control

DCR implements the state Erosion and Sediment Control (ESC) Program according to the *Virginia Erosion and Sediment Control Law, Regulations, and Certification Regulations* (VESCL&R). The law is carried out cooperatively by state and local government agencies to control sediment and runoff from land disturbing activities. DCR implements the state ESC program according to the law as is codified at Title 10.1, Chapter 5, Article 4 of the *Code of Virginia*, regulations are found at Section 4VAC30-50, and certification regulations are found at Section 4VAC50-50 of the Virginia Administrative Code.

DCR establishes statewide standards and guidance and provides training and education opportunities for local program personnel regarding erosion and sediment control. Technical assistance and advice is provided to localities local erosion and sediment control. DCR staff periodically conducts comprehensive reviews and evaluations of local government erosion and sediment control programs, specifically focusing on the administrative, enhancement and implementation of their local ordinances, which regulate land-disturbing activities. DCR regulates land-disturbing activities on state and federal lands, as well as on a specific group of activities undertaken by utility, interstate and intrastate pipeline and railroad companies.

A network of local government operated ESC programs regulates most private projects involving a land-disturbing activity. There are 166 local ESC programs in Virginia. They include every county, city and many incorporated towns (some towns are covered by a county program). Specific components within local ordinances account for program administration, plan review and approval, site inspection, and enforcement on locally regulated projects. Although administrative procedures vary by locality, the basic ESC program components are consistent statewide. DCR staff provides technical assistance through ESC plan review, on-site inspection, enforcement support, local program planning, and provision of technical and regulatory guidance and training. Challenges remain is assuring that all local programs meet state standards and are applied consistently across the state.

Stormwater Management

The 2004 Virginia General Assembly unanimously passed House Bill 1177 transferring regulatory authority of National Pollutant Discharge Elimination System (NPDES) programs related to municipal separate storm sewer systems (MS4) and construction activities from the State Water Control Board to the Soil and Water Conservation Board and transferred oversight of these programs from the Department of Environmental Quality to the Department of Conservation and Recreation. This transfer became effective January 29, 2005. As a result, DCR is responsible for the issuance, denial, revocation, termination and enforcement of NPDES permits for the control of stormwater discharges from MS4s and land disturbing activities under the Virginia Stormwater Management Program.

The Virginia Stormwater Management (SWM) Program seeks to protect properties and aquatic resources from damage caused by increased volume, frequency and peak rate of stormwater runoff. The program seeks to protect those resources from increased nonpoint source pollution carried by stormwater runoff. SWM programs are implemented according to the *Virginia Stormwater Management Law* and *Virginia Stormwater Management Regulations*. The law is codified at Title 10.1, Chapter 6, Article 1.1. of the *Code of Virginia* and the Regulations are found at Section 4VAC50-60 of the Virginia Administrative Code. These statutes specifically set forth regulations regarding land development activities to prevent water pollution, stream channel erosion, depletion of groundwater resources, and more frequent localized flooding to protect property value and natural resources. SWM programs operated according to the law are intended to address these adverse impacts and comprehensively manage the quality and quantity of stormwater runoff on a watershed-wide basis.

DCR oversees regulated activities undertaken on state and federal property. In addition, DCR has regulatory oversight on all construction sites required to have a permit. Localities (counties, cities, and towns) have the option to establish a local SWM program to regulate these same activities on private property in their jurisdiction. State stormwater regulations promote consistency among local SWM programs by developing technical criteria and administrative procedures with which property owners and agents must comply. The regulations also provide a framework for regional stormwater plans to allow for strategic placement of stormwater controls to achieve stormwater quality and quantity benefits for large areas. The regulations were written so that all parties will work together to implement a consistent program to restore and protect watershed across political boundaries.

DCR's SWM Program develops technical criteria and policies to support statewide implementation of the program. DCR engineers serve as the approval authority for SWM plans for projects on state and federal lands and inspect these projects to ensure compliance. DCR staff work cooperatively with localities and provide assistance by reviewing ordinances and programmatic guidance and providing technical assistance to ensure compliance and to promote innovate, cost-effective solutions for protecting natural resources.

Nutrient Management Program

DCR's Nutrient Management Program was established in 1989. The program's purpose is to encourage proper land application and efficient use of fertilizers, manures, biosolids and other nutrient sources used on agricultural and urban lands in order to protect and improve the quality of Virginia's ground and surface waters. DCR works closely with large and small agricultural operations to manage agricultural nutrients. Education of urban landowners about the impacts of nutrient runoff from lawns, gardens, golf courses, parking lots, and other landscaped areas is also a focus of the nutrient management program.

DCR administers a program to certify private and public sector nutrient management planners. Virginia's *Nutrient Management Training and Certification Regulations*, which govern the program, were adopted in January 1996. The regulations stipulate requirements for certification and criteria for nutrient management plans developed by certified individuals. DCR conducts training sessions and examinations every six months. The regulations underwent significant revision in 2005 with the addition of phosphorus based nutrient management requirements, revisions to the application and timing of nutrient application and other modifications. The revised regulations became effective on January 11, 2006. DCR's Division of Soil and Water Conservation staff also work with DCR's Chesapeake Bay Local Assistance staff and soil and water conservation districts to help facilitate preparation of Bay Preservation Act plans. These plans address soil erosion, nutrient management and integrated pest management of farms within Bay Preservation Areas as defined by the Chesapeake Bay Preservation Area Designation and Management Regulations.

Nutrient management specialists also provide plan writing assistance and support to approximately 20 counties that require farm nutrient management plans in local confined livestock zoning ordinances. DCR staff works with state universities to develop technology capable of maximizing efficient nutrient use and minimizing losses. DCR is responsible for nutrient management plan approval for producers requiring a Department of Environmental Quality-issues Virginia Pollution Abatement general permit for confined animal operations. Virginia's Department of Health's Biosolids (sewage sludge) Use Regulations cites DCR as a resource, and our staff reviews sludge permit applications to address nutrient management issues. Nutrient management field staff also help train water quality specialist employed by Virginia's soil and water conservation districts.

Virginia is a leader in implementing urban nutrient management strategies in cooperation with private industry to reduce nutrient runoff from lawns, office parts, golf course and other developed lands. DCR runs the Water Quality Improvement Agreement Program for urban lawn care retailers, lawn care companies and others who wish to be recognized for offering environmentally responsible products and services. Businesses that have signed such agreements offer their customers information about lawn care or the application of nutrients within established criteria that minimize nutrient loss by controlling application rates and timing. Voluntary participation in the program leads to reduced nutrient loss to Virginia's ground and surface waters, including the Chesapeake Bay and its tributaries.

Tributary Strategies

Virginia has been a partner in the restoration of the Chesapeake Bay since signing the first Chesapeake Bay Agreement in 1983. Virginia's involvement has continued with the most recent Chesapeake 2000 Agreement. Central to Virginia's Chesapeake Bay initiatives have been efforts to reduce excess quantities of nitrogen, phosphorus, and sediments. Beginning in 1992, Virginia began developing strategies for nutrient and sediment reductions in each of the bay's major tributary basins: the Shenandoah / Potomac, Rappahannock, York, James, and collectively, the creeks and rivers of the Eastern Shore.

In January of 2005, the *Nutrient and Sediment Reduction Tributary Strategy for Virginia's Chesapeake Bay Basins* (Virginia Tributary Strategy) document defining the nutrient and sediment reduction actions necessary to support the living resources of the bay watershed was released. Following public comments on draft strategies released in April 2004, the document was developed to provide a watershed-wide overview of the actions required to achieve the ambitious goals of the commonwealth and its partners. Individual nutrient and sediment reduction plans were issued in spring of 2005 for each of the major tributary basins. These strategies were constructed to meet the nutrient reduction targets established by the Chesapeake Bay Program. The strategies were developed in partnership with natural resource agencies and local stakeholders. Full versions of the strategies are available on the Virginia Secretary of Natural Resources website at <http://www.naturalresources.virginia.gov>.

The tributary strategies outline ambitious nutrient and sediment reduction goals and will require significant and consistent resources for implementation over the foreseeable future.

Cooperative Watershed Programs

Watershed based cooperative nonpoint source pollution coordination and implementation initiatives are coordinated for each of the major river basins through the roundtables. The Virginia Watersheds Alliance (VAWA) is a new organization with representation from all 13 major river basins in Virginia, was prompted into existence by Senate Bill 1141 and is gaining momentum. VAWA meets monthly by teleconference and occasionally in person to address mutual water quality issues. The Virginia Watersheds Alliance is in the process of attaining 501(c)(3) status. An update on 2004 and 2005 activities for each of the major basins and their roundtables follows.

Albemarle Sound

Over the past two and half years, Virginia strengthened its working relationship with North Carolina, as partners in the Albemarle-Pamlico National Estuary Program. Virginia's continued partnership help assure the successful restoration and conservation of this national treasure, the second largest estuary system in the nation.

During 2004, staff participated in the annual meeting of the Albemarle Pamlico National Estuary Program, and then Deputy Secretary of Natural Resources, David Paylor, was the featured luncheon speaker at the event in New Bern, North Carolina.

The Southern Watershed Area Management Program (SWAMP), hosted by the Hampton Roads Planning District Commission continues to work with the Albemarle-Pamlico National Estuary Program (APNEP) in an effort to exchange planning and environmental management information with the neighboring North Carolina counties. Utilizing the Multiple Benefits Conservation Plan and the Conservation Corridor Plan previously developed by the program SWAMP is currently working with the cities of Virginia Beach and Chesapeake on any possible wetland mitigation as a result of the proposed Southeastern Parkway Project. The Multiple Benefits Conservation Plan is designed as a strategy for increasing the number and type of benefits derived from wetland compensation and other types of conservation in the Southern Watershed Area.

Big Sandy River Basin Coalition

The Big Sandy River Basin Coalition (BSRBC) is currently planning for their annual meeting scheduled for April 2006. Several ongoing efforts will be culminated at that time, one of which involves an increase in the number of directors from five to twenty one (21). This will enable each state (Kentucky, West Virginia, and West Virginia) to have seven directors and operate independently of one another to take advantage of funding sources that may be available only to any one of the individual states (i.e., PRIDE funds in Kentucky and WQIA funds in Virginia). The BSRBC Board recently met to further galvanize partnership efforts with the Ohio River Sanitation Commission (ORSANCO), a regulatory entity that has the potential to assist the BSRBC in applying pressure to certain localities in Kentucky and West Virginia that have traditionally ignored water quality regulations.

Chowan River

During 2004, DCR, in partnership with the Cooperative Extension Service, local Soil and Water Conservation Districts, Albemarle-Pamlico National Estuary Program and RC&D councils, initiated a bi-state program to offer farmers in the Chowan River Basin in North Carolina and Virginia an opportunity to recycle their used oil in a safe and environmentally sound manner on their farms. One hundred and thirty (130) used oil recycling tanks have been purchased and placed on farms for collecting used oil from all farm equipment. Plastic, double-walled tanks and large plastic funnels were supplied, and to date, 40,068 gallons of used oil have been collected and recycled.

In 2005, the Chowan Roundtable continues to work on capacity building with the Albemarle-Pamlico National Estuary Program in both the Virginia and North Carolina portions of the Chowan watershed. In September 2005, the Chowan Roundtable in coordination with the Chowan Basin SWCD and the Blackwater / Nottoway River Keepers Association completed Chowan Study Area Implementation Plans for the Nottoway, Blackwater and Raccoon areas. In

addition, DCR has added to the states natural area preserve system by the acquisition of an addition of 216 acres in 2005 in Sussex and Prince George Counties, Nottoway River Watershed.

Eastern Shore

Implementing Nonpoint Source Pollution (NPS) components of the *Eastern Shore Tributary Strategy* has been a cooperative team effort between the state and federal natural resource agencies and the Eastern Shore Watershed Network (ESWN). The ESWN is a diverse group of Eastern Shore stakeholders including the Eastern Shore Soil and Water Conservation District, staff of Accomack and Northampton counties, Accomack-Northampton Planning District Commission, Eastern Shore Resource Conservation & Development Council, the Eastern Shore Coast Keeper and citizens. The ESWN's role includes logistics, outreach, and implementation planning for the tributary strategies.

This group, which services as the tributary strategy team for the region, has been meeting regularly to develop an effective regional approach to implement the restoration targets listed in the Eastern Shore Tributary Strategy Input Deck. Using the states *Eastern Shore Tributary Strategy* NPS implementation plan as a guide a number of actions have been accomplished/ Agricultural implementation has increased as a result of the increase in cost share allocations to the Eastern Shore Soil and Water Conservation District. Urban, or non-agricultural, implementation is continuing at a slower pace due to resource limitations. As part of Tributary Strategy Implementation Planning the Eastern Shore SWCD and the Accomack-Northampton PDC have developed a GIS tool to analyze and map the presence or absence of vegetative shoreline buffers along the blue line streams in the Chesapeake Bay watershed in Accomack and Northampton counties. An effort to assess the cumulative impacts of land use practice that may be affecting the tidal waters of the Eastern Shore of Virginia is being planned. The baseline information will be assembled in a single database by watershed for the bayside Virginia Eastern Shore. This information will be placed in GIS format that can be used by planning commissions, wetlands boards and boards of zoning appeals when reviewing proposals and applications.

Lower James River and Lynnhaven Coastal Basins

The implementation of the Nonpoint Source Pollution (NPS) components plan for the Lower James and Lynnhaven portions of the *Chesapeake Bay Nutrient and Sediment Reduction Tributary Strategy for the James River, Lynnhaven and Poquoson Coastal Basin* has been a cooperative team effort between the state and federal natural resource agencies and the Lower James River Roundtable, the Hampton Roads local governments Chesapeake Bay Committee and the Hampton Roads Stormwater Committee, hosted by the Hampton Roads Planning District Commission (HRPDC). This tributary strategy team has been meeting regularly to develop an effective regional approach to implement the restoration targets listed in the Lower James River Tributary Strategy Input Deck.

Agricultural implementation has increased as a result of the increase in cost share allocations to the Peanut and Virginia Dare Soil and Water Conservation Districts. Urban, or

non-agricultural, implementation is continuing at a slower pace due to resource limitations. Regional environmental organizations, including the Elizabeth River Project and Lynnhaven 2007, are working with business and landowners to help reduce stormwater runoff through BMP demonstrations projects such as installing rain gardens on school grounds for use as outdoor classroom and working with homeowner on backyard buffer and living shoreline initiatives. Subcommittees have been working with the HRPDC staff to develop regional consensus on the technical aspects specific studies on street sweeping and bacteria sampling protocols.

Piedmont James Tributary Strategy Roundtable The Piedmont James Tributary Strategy Roundtable is now in its seventh official year of functioning since the tributary strategies development process began. The steering committee continues to meet regularly to communicate, exchange and disseminate information addressing the strategy and water quality issues. The group oversees and directs their consultant in meetings with local government staff, officials and with presentations to local boards of supervisors, planning commissions and PDC members. A tri-fold brochure was developed and work was completed on their website which serves as a primary communication tool for the roundtable. In May 2005, the roundtable sponsored a regional social marketing campaign related to proper fertilizer application, which aired on NBC Channel 12.

Potomac Roundtable

This Northern Virginia area roundtable has been very involved this year in the support of the Potomac Tributary Strategy. This DCR supported roundtable hosted a successful Potomac Forum IV for over 200 Northern Virginia stakeholders in late August at George Mason University's Prince William Campus. Presentations from DCR and DEQ on the Tributary Strategy Implementation for both point and nonpoint sources of pollution were highlighted. Numerous local governments presented talks on successful nonpoint source implementation efforts such as green roofs, urban nutrient management, street sweeping, and continuous no-till to name a few. The roundtable also established a website for members that includes meeting minutes and presentations for quarterly roundtable meetings. Both of these outreach efforts help keep the Northern Virginia area informed of important state efforts.

During 2004, nutrient management staff of DCR's Potomac Watershed office published an article in the *Virginia Turfgrass Council News*, an influential turf industry publication. The article highlights the innovative cost-share program developed to implement nutrient management plans on Virginia golf courses in the Chesapeake Bay watershed. In the course of 18 months, 16 golf courses, on approximately 1200 acres, have had plans developed and implemented. While continuing this program, staff is turning attention to local governments and the public lands they manage and fertilize. Water quality agreements and nutrient management plans are underway with Prince William, Stafford, Arlington, and Fairfax Counties.

During 2005, DCR Potomac Watershed nutrient management staff wrote a total on 57 agricultural nutrient management plans in the Potomac and Shenandoah basin covering 7,796 acres. Plans were prioritized according to the Tributary Strategy document as well as the Department of Environmental Quality 303(d) - impaired streams list. In the urban area, DCR Potomac Watershed staff lead the state in working with local governments as well as state and

federal staff in developing urban nutrient management plans on publicly owned land as well as private golf courses. Outreach to major fertilizer companies such as Scott's concerning re-labeling homeowner bags to include a water quality message was also successful.

New River Watershed Roundtable

The New River Watershed Roundtable over the past year has finalized its structure and elected Board members. The organization has approved Article of Incorporation and is proceeding with obtaining its 501(c)(3) status. DCR through grant funding has established a Watershed Field Coordinator position to help the organization with facilitating projects for outreach and on-the-ground nonpoint source pollution reductions. Currently the Roundtable is assisting applicants in applying for the most recent WQIF grant.

Rappahannock River Basin Commission

In 2004, DCR Rappahannock-York watershed office staff, located in Tappahannock, finalized project proposals with organizations, including Rappahannock River Basin Commission, RappFLOW and Northern Neck SWCD, for projects targeting outreach and education of NPS initiatives. Additionally, they are continuing to work with the Rappahannock Conservation Council on a series of workshops and projects with regional SWCDs. Completed components include; no-till field day, a tributary strategy flier, and newspaper advertisement promotion of cost-share programs. Urban staff is working closely with Stafford County and is in the final phase of a low impact development (LID) demonstration project, funded by DCR.

During 2005, the Rappahannock River Basin Commission has taken the lead on regional efforts to more specifically define how the Rappahannock Tributary Strategy can be implemented at the local level. This Nonpoint Source Workgroup, as part of the Commission, is comprised of a broad range of stakeholders from throughout the watershed. This workgroup has had presentations and discussions ranging from responsibility of Tributary Strategy implementation to development of implementation tools for local governments. With these discussions underway, the next step will be to more actively engage the Commission members, and ultimately, each local government into enhancing specific local programs, such as stormwater and land use planning.

An estimated 135 regional representatives made up of city council members, county boards of supervisors, nonprofit representatives, developers, and other community leaders participated in a 1-day regional planning and visioning exercise. The participants were asked to go through a visioning process and identify how the Fredericksburg region should be developed over the next 25 years. As part of this process, the participants established ground rules of development. The only one of these ground rules widely accepted by all participants was protection of the Rappahannock River. This visioning exercise is to be compiled and presented to each local government in the RADCO region over the next year with the hope of improving regional planning efforts among these localities.

Shenandoah

The Shenandoah Pure Water 2000 held a two-day meeting on June 17-18 to discuss major issues in the watershed. More than 70 representative stakeholders from throughout the watershed attended the annual conference “Building a Watershed Community”. Agenda items included water supply, land conservation, open space planning, and conservation easements. In addition, over twenty breakout sessions addressed a range of topics of concern to attendees including fish kills, water law, development, comprehensive plans, citizen engagement, and future strategies. A plan was discussed as to what courses of action needed to take place to protect the watershed. In fall 2005, Pure Water 2000 hosted a forum to discuss the fish kill on the South Fork of the Shenandoah. The history of fish kills was discussed as well as what measures can be taken to avoid this in the future. The meeting resulted in DEQ offering to conduct more analytical monitoring in the future.

Upper James Roundtable

The Upper James Roundtable is proceeding with its application to become a Resource Conservation & Development Council under the name of Mountain Waters RC&D. If the roundtable achieves the RC&D status it is expected to receive federal funding for 1.5 employees to provide technical assistance and administrative support. The roundtable also hosted a workshop at Lake Moomaw with topics including water quality/quantity, historical resources, and the lake’s importance as a recreational attraction. Discussions as to what significant changes may be occurring in the future were also held.

Upper Roanoke Roundtable

The Upper Roanoke Roundtable helped organize the Fall Roanoke River Clean-up and Celebration held on October 1, 2005. The event was a huge success with a good turnout, and an excellent review in the *Roanoke Times*, as an effective clean-up. An estimated 24 tons of trash were pulled from streams and stream banks by over 350 volunteers and collected by the City of Roanoke. The roundtable remains very active in supporting the Virginia Save Our Streams program. The Upper Roanoke River Roundtable received the Water For Life award from the Southeastern Rural Community Assistance Program (RCAP) during the National Drinking Water Week luncheon held on May 4, 2005 at Hotel Roanoke. The award was in recognition of the Roundtable’s contribution to enhance the quality of life in the community. Three board members attended the luncheon and awards ceremony.

Upper Tennessee River Roundtable

The Upper Tennessee River Roundtable (UTRR) has one year remaining in the three-year EPA grant that was received in 2003. Many projects are underway as the UTRR is trying not only to achieve the objectives, but also exceed them. Although implementation is in full swing for the EPA Grant, they are beginning to realistically consider “life after the EPA Grant” by

searching for other grant possibilities through the Highlands Action Program, the Water Quality Improvement Fund, and other sources.

The UTRR recently hired a coordinator to implement the “Assign-A-Highway” Program, which uses probation and parole labor to pick up litter on court-appointed highway segments. The program is working remarkably well. They hope to expand the program statewide. Growth Readiness Training is underway in Tazewell County and about to begin in Wise County. A partnership consisting of the Southeast Watershed Forum, the Tennessee Valley Authority, the DCR, and the UTRR has been actively arranging training and workshop sessions with local governments to help them understand and plan for development to reduce the potential negative effects on water quality that come from over-developing a watershed. A WQIA workshop was held on November 1, 2005 in which approximately 45 people attended – most of which were representatives from local governments (towns and counties). As a result, new partnerships were formed as many people met for the first time and realized how their cooperative efforts could increase the likelihood of success.

York River and Small Coastal Basin Roundtable

In October of 2004, DCR, in conjunction with Middle Peninsula Planning District Commission, held a special scoping meeting for the re-establishment of the York River and Small Coastal Basin Roundtable. The first quarterly meeting of the roundtable will be held January 7, 2005. In December, DCR held a grant-writing workshop to teach grant writing skills and promote funding opportunities, including National Fish and Wildlife’s Small Watershed Grants Program.

The York River and Small Coastal Basin Roundtable was reestablished in 2005 with the adoption of a mission statement at their meeting in April 2005. The Middle Peninsula Planning District Commission has played a leading role in coordinating roundtable communication by establishing a database of participants and stakeholders and establishing and maintaining the roundtables website, <http://www.yorkwatershed.org/>. Throughout 2005, the York River and Small Coastal Basin Roundtable held several meetings to educate stakeholders and to critically discuss and analyze regional nonpoint source issues.

The water quality education related forums have focused on stormwater and low impact development, nutrient trading, forest harvesting practices, and onsite disposals systems. The goal thus far has been to raise awareness of forum participants, with the future goal to be to better engage local governments to ensure that they have the knowledge and available tools to most appropriately address nonpoint source pollution. Watershed planning continues to be a positive factor in the York and coastal watersheds. A regional workshop, including planning district commissions, soil and water conservation districts, EPA, DCR, and local government representatives took place in February 2006. This workshop will build upon past successful watershed planning efforts, such as Dragon Run, and to expand watershed planning to encourage greater participation by more localities.

APPENDIX A

Virginia Agricultural BMP Cost-Share Program Funding Program Year 2006

Virginia Agricultural BMP Cost-Share Program Funding --Program Year 2006

Prepared 6/21/05; Revised 7/1/05		Chesapeake Bay Basin			SWCDs in Southern Rivers			Grand Total Bay & SR Combined
G. Agree #	SWCD	Bay "Base" (\$4 Million)	Bay 3 BMPs (\$2 Million)	2006 Total Program Allocation	SR "Base" (\$3 Million)	SR "TMDL" (\$1 Million)	2006 Total Program Allocation	
50320-06-50	APPOMATTOX RIVER	\$9,393	\$17,000	\$26,393	\$79,013	\$987	\$80,000	\$106,393
50320-06-52	BIG WALKER				\$90,566	\$30,879	\$121,445	\$121,445
50320-06-51	BIG SANDY				\$12,224	\$0	\$12,224	\$12,224
50320-06-53	BLUE RIDGE	\$10,568	\$0	\$10,568	\$149,856	\$117,392	\$267,248	\$277,816
50320-06-54	CLINCH VALLEY				\$171,008	\$8,396	\$179,404	\$179,404
50320-06-65	CHOWAN BASIN				\$184,377	\$116,381	\$300,758	\$300,758
50320-06-55	COLONIAL	\$26,658	\$270,807	\$297,465				\$297,465
50320-06-56	CULPEPER	\$469,430	\$62,420	\$531,850				\$531,850
50320-06-57	DANIEL BOONE				\$106,250	\$10,951	\$117,201	\$117,201
50320-06-58	EASTERN SHORE	\$103,592	\$153,527	\$257,119	\$144,225	\$10,769	\$154,994	\$412,113
50320-06-59	EVERGREEN				\$57,427	\$37,528	\$94,955	\$94,955
50320-06-60	HALIFAX				\$120,291	\$141,416	\$261,707	\$261,707
50320-06-61	HANOVER-CAROLINE	\$92,453	\$200,000	\$292,453				\$292,453
50320-06-62	HEADWATERS	\$474,857	\$25,449	\$500,306				\$500,306
50320-06-63	HENRICOPOLIS	\$6,183	\$52,722	\$58,905				\$58,905
50320-06-64	HOLSTON RIVER				\$203,298	\$31,040	\$234,338	\$234,338
50320-06-66	JAMES RIVER	\$8,359	\$56,412	\$64,771	\$15,626	\$2,898	\$18,524	\$83,295
50320-06-67	JOHN MARSHALL	\$313,017	\$27,856	\$340,873				\$340,873
50320-06-68	LAKE COUNTRY				\$132,803	\$56,381	\$189,184	\$189,184
50320-06-69	LONESOME PINE				\$47,204	\$15,000	\$62,204	\$62,204
50320-06-70	LORD FAIRFAX	\$459,114	\$35,730	\$494,844				\$494,844
50320-06-71	LOUDOUN	\$276,890	\$11,664	\$288,554				\$288,554
50320-06-72	MONACAN	\$15,842	\$89,057	\$104,899				\$104,899

Prepared 6/21/05; Revised 7/1/05		Chesapeake Bay Basin			SWCDs in Southern Rivers			
				2006			2006	Grand Total
		Bay "Base"	Bay 3 BMPs	Total Program	SR "Base"	SR "TMDL"	Total Program	Bay & SR
		(\$4 Million)	(\$2 Million)	Allocation	(\$3 Million)	(\$1 Million)	Allocation	Combined
50320-06-73	MOUNTAIN	\$101,052	\$12,607	\$113,659				\$113,659
50320-06-74	MOUNTAIN CASTLES	\$133,341	\$12,079	\$145,420	\$15,089	\$8,069	\$23,158	\$168,578
50320-06-75	NATURAL BRIDGE	\$198,260	\$11,743	\$210,003				\$210,003
50320-06-76	NEW RIVER				\$170,192	\$10,113	\$180,305	\$180,305
50320-06-77	NORTHERN NECK	\$128,432	\$179,813	\$308,245				\$308,245
50320-06-78	NORTHERN VA	\$6,822	\$0	\$6,822				\$6,822
50320-06-79	PATRICK				\$83,262	\$5,154	\$88,416	\$88,416
50320-06-80	PEAKS OF OTTER	\$12,390	\$0	\$12,390	\$121,034	\$64,435	\$185,469	\$197,859
50320-06-81	PEANUT	\$100,000	\$120,000	\$220,000	\$51,806	\$48,194	\$100,000	\$320,000
50320-06-82	PETER FRANCISCO	\$36,134	\$23,129	\$59,263				\$59,263
50320-06-83	PIEDMONT	\$51,556	\$49,655	\$101,211	\$27,753	\$19,032	\$46,785	\$147,996
50320-06-84	PITTSYLVANIA				\$192,713	\$56,203	\$248,916	\$248,916
50320-06-85	PRINCE WILLIAM	\$32,092	\$5,421	\$37,513				\$37,513
50320-06-86	ROBERT E. LEE	\$92,316	\$19,105	\$111,421	\$121,895	\$27,040	\$148,935	\$260,356
50320-06-87	SCOTT COUNTY				\$108,394	\$12,890	\$121,284	\$121,284
50320-06-88	SHENANDOAH VALLEY	\$548,829	\$38,046	\$586,875				\$586,875
50320-06-89	SKYLINE	\$0	\$0	\$0	\$307,553	\$63,122	\$370,675	\$370,675
50320-06-90	SOUTHSIDE				\$102,931	\$83,189	\$186,120	\$186,120
50320-06-91	TAZEWELL				\$92,881	\$12,156	\$105,037	\$105,037
50320-06-92	THOMAS JEFFERSON	\$118,650	\$44,544	\$163,194				\$163,194
50320-06-93	THREE RIVERS	\$70,391	\$290,576	\$360,967				\$360,967
50320-06-94	TIDEWATER	\$35,393	\$147,550	\$182,943				\$182,943
50320-06-95	TRI-COUNTY/CITY	\$65,394	\$41,088	\$106,482				\$106,482
50320-06-96	VIRGINIA DARE	\$2,592	\$2,000	\$4,592	\$90,329	\$10,385	\$100,714	\$105,306
	Totals:	\$4,000,000	\$2,000,000	\$6,000,000	\$3,000,000	\$1,000,000	\$4,000,000	\$10,000,000

APPENDIX B

WQIF Proposals FY 2006

Prop. #	FY2006 WQIF Proposals Project Sponsor & Project Title	FY2006 WQIF	FY2006 MATCH	Future WQIF \$ Request
01-SU	City of Hampton Sanitary Sewer Extension and Public Education	\$30,000	\$31,625	
02-SU	City of Hampton Coliseum North Water Quality Basin	\$10,000	\$10,000	\$650,000
03-D	Town of Taxewell Upper Clinch River Stormwater Management Project	\$200,000	\$252,000	\$600,000
04-W	City of Fairfax Ashby Pond Improvement Project	\$100,000	\$135,000	
05-T	Middle Peninsula PDC Middle Peninsula Regional On-Site Wastewater Treatment and Disposal Funding Program (Established 1997)	\$10,000	\$100,000	
06-A(I)	Upper Tennessee River Roundtable, Inc Southwest Virginia Growth Readiness Initiative	\$100,000	\$114,000	
06-A(II)	Upper Tennessee River Roundtable, Inc Southwest Virginia Growth Readiness Initiative	\$76,000	\$76,000	
07-W	The Howard Gardner School STREAM - Stewardship Through Research, Environmental Action, and Modeling	\$25,625	\$25,625	
08-VA	Virginia Tech -- Department of Dairy Science Precision Phosphorus Feeding: Targeted Environmental Solutions for Virginia Dairy Farms	\$400,000	\$400,000	
09-C	Roanoke County - Dept. of Parks, Recreation & Tourism Mudlick Creek Urban Stream Restoration at Garst Mill Park	\$148,000	\$148,000	\$209,100
10-ST	City of Harrisonburg Enhancing City Programs for Stream Health: An Action Plan for the Blacks Run / Cooks Creek Watersheds	\$144,500	\$148,950	
11-T	Greene County Green County Ordinance Review for Water Quality	\$50,000	\$55,000	
12-J	Thomas Jefferson SWCD Cost-Share Assistance and Edu. Program for On-Site Sewage	\$62,050	\$71,944	

13-ST	Virginia Tech Improving Water Quality through Export of Manure-based Compost to Low Phosphorus -containing, Distrubed Soils	\$73,184	\$74,595	
14-T	Rappahannock County Implementing the Strategy: The Rapp. River Starts Here	\$114,400	\$189,250	\$107,600
15-J	County of Albemarle Albemarle County Riparian Buffer Restoration Initiative	\$159,000	\$161,120	\$640,500
16-D	Town of Bluefileld Beaver Pond Creek Wetland Restoration & Water Quality...	\$73,000	\$73,000	
17-J	The County of Prince Edward Sandy River Reservoir Protection Overlay District	\$47,250	\$47,250	
18-ST	Friends of the Shenandoah River Long-term Water Quality Monitoring of the Shenandoah River	\$74,000	\$222,307	
19-T	Middle Peninsula PDC (on behalf of Matthews County) Cooperative Demonstration Project: Low Impact Development Implementation in Mathews County, Virginia	\$25,000	\$25,000	
20-C	Franklin County - Parks and Recreation Smith Mountain Lake Community Park Shoreline Stabilization	\$25,000	\$25,000	
21-J	Ukrop's Super Markets, Inc. Bioretention area for retail store parking lot	\$35,000	\$70,000	
22-SU	Accomack County Stormwater BMP (Wet Detention Areas) - Accomack County, Virginia	\$150,000	\$81,500	\$450,000
23-D	Pepper's Ferry Regional Wastewater Treatment Authority Stormwater Management & Streambank Erosion Control	\$103,020	\$103,020	\$53,590
24-D	Virginia Tech Reducing Urban Stormwater Impacts within the Strouble Creek Watershed	\$99,383	\$99,383	
25-C-ST	Western Virginia Land Trust Upper James River Riparian Protection Partnership	\$100,000	\$100,000	
26-T	Hanover County - Dept. of Public Utilities Atlee Manor Sewerage	\$200,000	\$244,444	\$600,000
27-W	George Mason University Investigation of a nonotechnology system for removal of phosphate from Virginia watersheds	\$99,977	\$99,986	

28-C-D	Western Virginia Land Trust Upper Roanoke and Little River Riparian Partnership	\$100,000	\$100,000	
29-J	Living Education Center For Ecology and The Arts Shenks Branch Stream Restoration Project	\$21,000	\$21,000	
30-ST	City of Lexington Water Quality Improvements in Woods Creek Watershed	\$36,000	\$36,000	
31-ST	City of Waynesboro Chatham Road Stormwater Management Project	\$100,000	\$100,000	\$515,951
32-SU	City of Norfolk - Division of Environmental SWM Old Dominion University Drainage Canal Wetland Restoration	\$190,255	\$190,255	
33-T	County of Stafford Implementation of the Stafford County Rappahannock Watershed Plan	\$70,200	\$76,644	
34-ST	Shenandoah Valley SWCD Common Sense Solutions to Water Pollution	\$58,056	\$71,858	
35-T	James City County (#1) - Environmental Div. & Dev. Mgt. Sediment Basin Stream Channel Protection Volume Study	\$50,000	\$50,000	\$25,000
36-T	James City County (#2) - Environmental Div. & Dev. Mgt. Powhatan Creek Flourometer Study	\$50,000	\$50,000	\$25,000
37-J	Chesterfield County - Office of Water Quality Chesterfield County LID Project	\$ 169,540	\$169,540	\$84,770
38-ST	Potomac Conservancy Improving Water Quality in a Changing Landscape: Restoration and Permanent Protection in the Northern Shenandoah Valley	\$83,711	\$115,255	
39-T	Spotsylvania County Massaponax Creek Watershed Improvement Plan	\$100,000	\$101,195	\$318,813
40-D	New River Highlands RC&D Council New River Streambank Stabilization Project	\$100,000	\$147,008	
41-SU	Virginia Wesleyan College Green Roof Demo. Project - Smithdeal & Gum Residence Halls	\$100,000	\$105,389	
42-J	City of Richmond Forest Hill Park Lake / Reedy Creek Area Demonstration Project	\$31,002	\$31,002	

43-C	Town of South Boston Practical Leak Detection and Water Quality Impairment	\$200,000	\$200,000	
44-W	Fauquier County Fauquier County Riparian Buffer Easement Program	\$96,271	\$140,271	
45-A	Town of Pennington Gap North Fork Powell River Greenway	\$219,550	\$219,550	
46-W	City of Manassas Winters Branch Stormwater Management Enhancement and Stream Valley Restoration & City-Wide Operational Improvements	\$143,875	\$143,875	\$386,575
47-A	Lonesome Pine SWCD Guest River Restoration Project	\$100,000	\$104,500	
48-T	Culpeper SWCD Blueprint for Regional Soil & Water Conservation	\$5,300	\$4,980	
49-A	Lee County BOS Powell River Watershed Wastewater Reduction Project	\$306,000	\$323,382	
50-T	James City County (#3) - Environmental Div. & Dev. Mgt. Protecting Resources in Delicate Environments Mini-Grant Program	\$25,000	\$25,000	
51-J	City of Lynchburg College Lake Forebay Project	\$200,000	\$200,000	\$450,000
52-T	James City County (#4) Community Conservation Partnership Incentive Program	\$200,000	\$200,000	\$600,000
53-T	James City County (#5) Longhill Connector Road Regional BMP	\$100,000	\$100,000	
54-SU	Accomack County Environmental Planning Inspector	\$104,058	\$72,314	\$179,877
55-ST	Shenandoah Valley Pure Water 2000 (#1) Restoring the Smith Creek Watershed	\$48,550	\$48,550	
56-ST	Shenandoah Valley Pure Water 2000 (#2) Restoring the Shenandoah Blueway and its Tributaries: Six Community Restoration and Edu./Demonstration Projects	\$200,000	\$200,000	
57-T	James City County (#6) Sunterra - Powhatan Plantation stream restoration	\$150,000	\$150,000	

58-J	James River Association Extreme Stream Makeover	\$67,801	\$67,801	
59-T	James City County (#7) Gordon Creek Watershed Management Plan	\$30,000	\$30,000	
60-A	Clinch Valley SWCD Wastewater NPS Pollution Reduction Pilot Program	\$25,845	\$26,197	
61-T	James City County (#8) Ware Creek Watershed Management Plan	\$30,000	\$30,000	
62-ST	City of Staunton Lewis Creek Watershed Stormwater Nutrient & Sediment Removal Demonstration Project	\$76,500	\$109,322	
63-A	Department of Mines, Minerals, & Energy Norton Gully Maintenance Project	\$80,000	\$80,000	
64-A	Department of Mines, Minerals, & Energy Arno Sedimentation Maintenance Project	\$50,000	\$156,250	
65-A	Department of Mines, Minerals, & Energy Craborchard Branch Outsoles Project	\$10,000	\$17,250	
66-ST	Shenandoah Valley Discovery Museum Discovery Museum in Jim Barnett Park	\$100,000	\$174,892	
67-SU	City of Norfolk - Department of Public Utilities Wastewater Infrastructure Rehabilitation Project	\$200,000	\$200,000	
68-T	Puquoson City Schools (#1) Poquoson Elementary School - Wetlands Restoration and Learning Laboratory	\$100,000	\$980,440	
69-T	Puquoson City Schools (#2) Poquoson Elementary School - Rainwater Harvesting System	\$100,000	\$1,193,450	
70-T	Alliance for the Chesapeake Bay (#1) Sentara - Building a Green Roof for the Greater Williamsburg Region: Healthier Patients through Healing Environments & A Healthier Community through Cleaner Water	\$93,259	\$254,337	
71-W	Alliance for the Chesapeake Bay (#2) Builders for the Bay - Fairfax County	\$30,000	\$57,000	

72-SU	The Woodlands Golf Course / City of Hampton Hampton River Shoreline Stabilization Project at Woodlands Golf Course	\$100,000	\$50,000	
73-W	Faison & Associates Upper King Street Integrated Green Roof / LID BMP Demonstration	\$192,000	\$192,000	
74-W	Prince William County Restoration of Stream Water Quality in Priority Watersheds in Prince William County	\$100,000	\$100,000	
75-W	Arlington County Donaldson Run Stream Restoration - Tributary B adjacent to N. Woodrow Street	\$100,000	\$60,000	
76-SU	City of Chesapeake Money Point Area Stormwater Improvements	\$100,000	\$100,000	
77-SU	Eastern Shore SWCD Occohannock/Nassawadox Watershed Nutrient and Sediment Reduction Project	\$100,000	\$100,000	
78-SU	Eastern Shore RC&D Council Shoreline Erosion Control Project with focus on Occohannock Creek	\$42,300	\$45,675	
79-D	Town of Cedar Bluff Cedar Bluff Stormwater Assessment & Bio-Retention Retrofit Project	\$56,860	\$52,800	
80-A	Big Sandy River Basin Coalition Big Sandy Basin Coalition Restoration Project	\$75,000	\$75,000	
81-T	New Kent County Fire Department Visitor Parking Retrofit to Low Impact Development (Demonstration Project)	\$96,400	\$9,000	
82-ST	Shenandoah County Water Resources Advisory Com. Septic System Maintenance Information Outreach Project	\$25,025		
83-A	Big Sandy SWCD Knox Creek Restoration Project	\$100,000	\$100,000	
84-T	Chesapeake Bay Foundation Sarah Creek Watershed Nonpoint Source Water Quality Partnership	\$52,825	\$53,131	
85-A	Wise County Countywide Sewage Management Planning and Public Outreach	\$200,000	\$91,813	
86-SU	City of Virginia Beach Virginia Beach Community Conservation Partnership Initiative Program	\$125,000	\$125,000	\$375,000

87-C	C2C Home C2C Home - Rainwater Harvesting System	\$76,000	\$87,000	
88-W	Fairfax County- Dept. of Public Works & Env. Services Water Quality Improvement Retrofit at the Fairfax County Govt. Center	\$200,000	\$323,000	\$600,000
89-SU	City of Virginia Beach Water Quality Coordination Capacity Building & Program Enhancement Project for the City of Virginia Beach	\$178,000	\$178,000	\$674,250
90-SU	The Elizabeth River Project (#1) Scotts Creek Water Quality Improvement Project - Phase II	\$69,900	\$70,000	
91-SU	The Elizabeth River Project (#2) Innovative Low Impact Development at Paradise Creek Nature Park	\$100,000	\$100,000	
92-T	Town of Orange Comprehensive Watershed Management Program for the Town of Orange	\$142,000	\$110,000	\$648,500
93-T	Culpeper County Culpeper County Stormwater Management Ordinance & LID Demo Project	\$42,000	\$43,284	
94-SU	Accomack-Northampton PDC Eastern Shore of Virginia Septic System Upgrade Program	\$100,000	\$133,000	
95-W	Prince William SWCD Evaluation of Horse Farm BMPs	\$80,250	\$80,717	
96-J	Henrico County - Dept. of Public Works Henrico County Urban Stormwater Retrofit and Nutrient Offsets and Credit Trading Evaluation	\$72,000	\$72,000	
97-ST	Valley Conservation Council Shenandoah Riparian Protection Program	\$100,000	\$300,000	
98-VA	Virginia Tech Development of Bilingual Multimedia Educational Materials in Urban Nutrient Management to Improve Water Quality	\$47,860	\$48,586	
99-T	Caroline County Dawn Decentralized Wastewater Treatment / Septic Connection	\$200,000	\$1,436,075	\$200,000
100-T	Haymount Limited Partnership Haymount Low Impact Development Project	\$97,371	\$91,200	
101-ST	Mountain Castle SWCD Promote Forage Practices to Reduce Soil & Nutrient Losses from Cool Season Hay and Pasture in Target Counties for Litter Transport	\$30,070	\$33,788	

102-SU	Northampton County Erosion & Sediment Control Program Enhancements	\$32,602	\$32,601	\$99,138
	TOTAL	\$10,119,624	\$14,352,816	\$8,493,664